

AMENDMENTS TO THE CLAIMS

Claim 1 (Withdrawn): A method for decellularizing separated skin, the method comprising treating simultaneously with a protease and a surfactant.

Claim 2 (Withdrawn): The method according to Claim 1 wherein the protease is trypsin.

Claim 3 (Withdrawn): The method according to Claim 1 wherein the surfactant is a polyoxyethylene p-t-octylphenyl ether surfactant.

Claim 4 (Currently Amended): An acellular dermal matrix produced by a process comprising
separating skin into epidermis and dermis;
recovering the dermis; and
decellularized decellularizing the dermis by simultaneously treating the dermis
simultaneously with a protease and a surfactant,
wherein the acellular dermal matrix consists essentially of a dermis fraction and
retains a normal dermal matrix structure.

Claim 5 (Original): The acellular dermal matrix according to Claim 4 wherein the protease is trypsin.

Claim 6 (Original): The acellular dermal matrix according to Claim 4 wherein the surfactant is a polyoxyethylene p-t-octylphenyl ether surfactant.

Claim 7 (Original): The acellular dermal matrix according to Claim 4 wherein human allogeneic skin is used as a starting material.

Claim 8 (Original): The acellular dermal matrix according to Claim 4 wherein porcine skin is used as a starting material.

Claim 9 (Withdrawn; Currently Amended): A method for producing an acellular dermal matrix, ~~the method comprising a decellularizing step of treating separated skin~~
separating skin into epidermis and dermis;
recovering the dermis; and
~~decellularized~~ decellularizing the dermis by simultaneously treating the dermis with a protease and a surfactant,
wherein the acellular dermal matrix consists essentially of a dermis fraction and
retains a normal dermal matrix structure.

Claim 10 (Withdrawn): The method according to Claim 9 wherein the protease is trypsin.

Claim 11 (Withdrawn): The method according to Claim 9 wherein the surfactant is a polyoxyethylene p-t-octylphenyl ether surfactant.

Claim 12 (Withdrawn): The method according to Claim 9 wherein human allogeneic skin is used as a starting material.

Claim 13 (Withdrawn): The method according to Claim 9 wherein porcine skin is used as a starting material.

Claim 14 (Withdrawn): A composite cultured skin employing as a substrate the acellular dermal matrix according to Claim 4.

Claim 15 (New): The acellular dermal matrix according to Claim 4, wherein said separating comprises immersing said skin in a mixed solution consisting essentially of trypsin and EDTA.

Claim 16 (New): The acellular dermal matrix according to Claim 4, wherein said skin is a split-thickness skin.

Claim 17 (New): The acellular dermal matrix according to Claim 4, wherein said protease is at a concentration ranging from 0.01 to 2.0 wt%.

Claim 18 (New): The acellular dermal matrix according to Claim 4, wherein said surfactant is at a concentration ranging from 0.05 to 1.0 wt%.

Claim 19 (New): The acellular dermal matrix according to Claim 4, wherein said treating is at a temperature ranging from 20°C to 37°C.

Claim 20 (New): The acellular dermal matrix according to Claim 4, wherein said treating is for a time ranging from 3 to 5 hours.

SUPPORT FOR THE AMENDMENTS

Claims 4 and 9 have been amended.

Claims 15-20 have been added.

The amendment of Claims 4 and 9 is supported by pages 11-16 of the specification and the Examples. Support for new Claims 15-20 is provided by the specification at page 11, line 26 to page 13, line 9.

The specification has also been amended to correct translation errors.

No new matter has been added by the present amendment.